ABSTRACT OF THE DISCLOSURE

A permanent magnet mótor for driving a fan is rotated while a movement of the rotor in a direction of thrust of a rotary shaft with a rotation of the fan is prevented by magnetic attraction force of a permanent magnet and a stator core. A surface magnetic flux density of the permanent magnet facing the stator core is lower at an end portion than at a central portion of the permanent magnet in the direction of thrust of the rotary shaft.